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=> s whey emulsion#
L1 9 WHEY EMULSION#

=> d 1-9 all

L1 ANSWER 1 OF 9 FSTA COPYRIGHT 2002 IFIS
AN 1999(08):P1096 FSTA
TI Fat/**whey emulsion** for production of reduced-fat cheese.
IN Marshall, R. J.
PA United Kingdom, University of North London; Univ. of North London, London N7 8DB, UK
SO UK Patent Application, (1998)
PI GB 2324236 A
PRAI GB 1997-7810 19970417
DT Patent
LA English
AB A method of preparing an emulsion for use in the manufacture of reduced fat cheese is described. It comprises an aqueous mixture of butter oil which is heated to 60.degree.C and added to distilled water or saline solution containing powdered whey protein concentrate (.ltoreq.5% by wt. of butter oil). The mixture is blended and homogenized to produce a creamy emulsion containing fat droplets measuring <1 .mu.m coated with the whey proteins which act as an emulsifier. The emulsion is added to skim milk at a rate sufficient to provide a fat content of .ltoreq.50% by wt. of the normal fat in milk and the mixture is then used to make cheese. [From En summ.]
CC P (Milk and Dairy Products)
CT CHEESEMAKING; EMULSIONS; FATS; FATS MILK; PATENTS; PROTEIN CONCENTRATES; WHEY; BUTTER OILS; FATS LOW FOODS; WHEY PROTEIN CONCENTRATES

L1 ANSWER 2 OF 9 FSTA COPYRIGHT 2002 IFIS
AN 1998(12):S2009 FSTA
TI Stability of model emulsions prepared using whey and muscle proteins.
AU Zorba, O.; Ozdemir, S.; Gokalp, H. Y.
CS Correspondence (Reprint) address, S. Ozdemir, Gida Muhendisligi Bolumu, Ziraat Fak., Ataturk Univ., Erzurum, Turkey
SO Nahrung, (1998), 42 (1) 16-18, 18 ref.
ISSN: 0027-769X
DT Journal
LA English
AB The efficacy of using liquid whey in conjunction with muscle proteins in model meat emulsions was assessed. Emulsions were prepared from corn oil plus liquid whey, meat proteins (total muscle protein (TMP), sarcoplasmic protein or myofibrillar protein) or liquid whey + TMP (1:1). Amounts of separated water, separated oil and emulsion stability were assessed. Results showed that the amount of water separated from the whey + TMP emulsion was lower than that of the meat protein emulsions and similar to that containing whey alone. The amount of separated oil was 9.40% in **whey emulsions**, compared with 0% in TMP and whey + TMP emulsions. Whey protein had the lowest emulsion stability among the proteins studied, while whey + TMP had the highest emulsion stability. [From En summ.]
CC S (Meat, Poultry and Game)
CT EMULSIONS; MEAT; PROTEINS ANIMAL; WHEY; ANIMAL PROTEINS

L1 ANSWER 3 OF 9 FSTA COPYRIGHT 2002 IFIS
 AN 1997(07):P0173 FSTA
 TI The effects of .beta.-lactoglobulin genetic variants A and B on the functional properties of whey under different conditions.
 AU Dal Bo, A.; Pitotti, A.
 CS Food Sci. Dep., Univ. of Udine, 97-33100 Udine, Italy
 SO Food Hydrocolloids, (1997), 11 (1) 41-48, 37 ref.
 ISSN: 0268-005X
 DT Journal
 LA English
 AB Partially delactosated and demineralized whey protein powders were purified from pooled milks of individual cows homozygous for the .beta.-lactoglobulin (.beta.-Lg) genetic variants A and B (whey A and whey B). The protein composition of the two samples was similar. The two whey protein powders were dissolved in water at different pH (2, 4.5, 6.8) and NaCl concentrations (150 and 400 mmol/dm.sup.3), and emulsions were made utilizing grape-seed oil. Emulsion stability (ES), emulsion activity index (EAI) and emulsion capacity (EC) were examined. The results showed the influence of the two genetic variants of .beta.-Lg on the functional behaviour of **whey. Emulsion** obtained from B powder solutions showed the higher stability at the different test conditions. The best results occurred at pH 6.8 with no significant differences between the two tested NaCl concentrations. At pH2 and 400 mmol/dm.sup.3 NaCl, both samples did not demonstrate any stability. Data on emulsion capacity indicated that whey B is less affected by the different physicochemical conditions tested (pH, NaCl concentration, heat treatment at 90.degree.C/5 min), while whey A gave the highest and the lowest EC values depending on the experimental conditions.
 CC P (Milk and Dairy Products)
 CT DAIRY PRODUCTS; FUNCTIONAL PROPERTIES; GENETICS; LACTOGLOBULINS; PHYSICAL PROPERTIES; PROTEINS; WHEY; Nb -LACTOGLOBULIN; EMULSIFICATION PROPERTIES

L1 ANSWER 4 OF 9 FSTA COPYRIGHT 2002 IFIS
 AN 1996(05):P0016 FSTA
 TI Some emulsion characteristics of nonfat dry milk, skimmed milk and cheese whey.
 AU Ozdemir, S.; Zorba, O.; Gokalp, H. Y.
 CS Ziraat Fak. Gida Muhendisligi, Ataturk Univ., Bolu, Erzurum, Turkey
 SO Turkish Journal of Agriculture and Forestry, (1994), 18 (6) 507-513, 15 ref.
 ISSN: 1010-7649
 DT Journal
 LA Turkish
 SL English
 AB Emulsion characteristics of dried skim milk, skim milk and whey standardized to 0.5% protein were determined. Emulsion capacity was highest for **whey. Emulsion** stability of dried skim milk and skim milk was higher than that of whey. Highest emulsion viscosity was found in skim milk samples. Emulsion viscosity of all samples increased after cooking. It is concluded that dried skim milk, skim milk and whey may be used for improving the emulsion properties of other products. [From En summ.]
 CC P (Milk and Dairy Products)
 CT DAIRY PRODUCTS; FUNCTIONAL PROPERTIES; MILK; PHYSICAL PROPERTIES; WHEY; EMULSIFICATION PROPERTIES; SKIM MILK

L1 ANSWER 5 OF 9 FSTA COPYRIGHT 2002 IFIS
 AN 1995(09):P0115 FSTA
 TI [Measuring the rate at which the relative moisture equilibrium (relative RH) is reached when evaluating the degree of dispersion and stability of **whey emulsions.**]
 AU Lerici, C. R.; Corradini, C.; Pittia, P.

CS Dipartimento di Sci. degli Alimenti, Univ. degli Studi di Udine, Udine, Italy

SO Latte, (1995), 20 (3) 279-281, 13 ref.
ISSN: 0392-6060

DT Journal

LA Italian

AB A test method is described for comparing the degree of dispersion and stability of emulsions comprising oil and whey in water. The method involves measuring the speed at which sample equilibrium RH is reached in a hygrometer cell held at constant ambient temp. and at a very low RH (.ltoreq.10%). The method is non-destructive, relatively rapid and suitable for detecting even small changes in the distribution of the aqueous and lipid phases in surface layers of **whey emulsions**.

CC P (Milk and Dairy Products)

CT APPARATUS; DAIRY PRODUCTS; DISPERSIONS; EMULSIONS; HUMIDITY; PHYSICAL PROPERTIES; STABILITY; WHEY; DISPERSION; HYGROMETERS

L1 ANSWER 6 OF 9 FSTA COPYRIGHT 2002 IFIS

AN 1984(03):G0219 FSTA

TI [Food products from emulsions based on milk by-products.]

AU Kastornykh, M. S.; Demidova, I. B.; Semenov, S. G.; Kuz'mina, V. A.

CS Moskovskii Ordena Trudovogo Krasnogo Znameni Inst. Narodnogo Khozyaistva im G. V. Plekhanova, Moscow, USSR

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Pishchevaya Tekhnologiya, (1982), No. 6, 42-45, 3 ref.

DT Journal

LA Russian

AB Recipes are given for products based on dried whey, including mayonnaise, condensed cocoa milk, and a carrot beverage. Low-Ca co-precipitate and fat-free curd cheese may be used for fish pastes, and fat-free curd cheese for fruit pastes. All these emulsions can be improved by adding acid polysaccharides (low-esterified pectin, sodium alginate) and Ca salts (acetate, gluconate, chloride).

CC G (Catering, Speciality and Multicomponent Foods)

CT BY-PRODUCTS; DRIED FOODS; EMULSIONS; PATENTS; WHEY; DRIED WHEY; PATENT; RECIPES # DRIED; RECIPES # EMULSION PRODUCTS; **WHEY EMULSION PRODUCTS**

L1 ANSWER 7 OF 9 FSTA COPYRIGHT 2002 IFIS

AN 1984(02):P0234 FSTA

TI [Emulsification of dried milk whey.]

AU Demidova, I. B.; Kastornykh, M. S.; Lovachev, L. N.; Darchiev, B. Kh.

CS Moskovskii Ordena Trudovogo Krasnogo Znameni Inst. Narodnogo Khozyaistva im. G. V. Plekhanova, Moscow, USSR

SO Izvestiya Vysshikh Uchebnykh Zavedenii, Pishchevaya Tekhnologiya, (1982), No. 4, 31-34, 3 ref.

DT Journal

LA Russian

AB Emulsification of dried milk whey containing added sunflower oil was studied to determine types and stability of emulsions relative to concn. of whey in the solution and vol. of fat phase; effects of environment and heat treatment before emulsification on emulsion stability were also studied. Dried whey contained 4.37% water, 16.64% proteins, 1.38% lipids, 68.04% saccharides and 9.57% ash. Type and stability of emulsions depended on emulsifier concn. and phase ratio. Max. stability was found in emulsion containing 75% oil and .gtoreq.9% whey, and at pH 7.5-8.5. Stability of emulsions was enhanced by heating at 55-100.degree. C before emulsifying.

CC P (Milk and Dairy Products)

CT DRIED FOODS; EMULSIFICATION; EMULSIONS; STABILITY; WHEY; DRIED; DRIED WHEY; SUNFLOWER OILS-CONTAINING; SUNFLOWER OILS-CONTAINING DRIED; **WHEY EMULSIONS**

L1 ANSWER 8 OF 9 FSTA COPYRIGHT 2002 IFIS
 AN 1972(10):P1472 FSTA
 TI Stabilization of milk fat/cheese **whey emulsions**.
 AU Guy, E. J.; Vettel, H. E.; Pallansch, M. J.
 CS Dairy Products Lab., Marketing & Nutr. Res. Div., USDA, Washington DC
 20250, USA
 SO Food Technology, (1972), 26 (2) 50-55, 10 ref.
 DT Journal
 LA English
 AB This paper described the production and properties of food-grade
 oil-in-water emulsions of milk fat in concentrated sweet Cheddar cheese
 whey. Cream or butter can be used as the source of fat. The emulsions are
 spreads that are butter-like in appearance and have a unique flavour and
 plasticity. A typical finished product contains 34-37% cream fat, 33-36.3%
 whey solids, 25% moisture, 4% milk or cream solids-not-fat, 0.5% mono- and
 diglycerides (emulsifier), 0.1% potassium sorbate and 0.1-1.0% total salt.
 Analysis of a spread with a 1.0 fat/solids-not-fat ratio gives the
 following results: 37.5% fat, 27.8% lactose, 25.0% moisture, 5.6% protein,
 and 3.6% ash. Products can be produced with zero coliform count and as low
 as 5000 total bacteria/g. The effect of various processing conditions were
 studied including: the effect of processing conditions on stability and on
 protein adsorption by fat; the effect of homogenization pressure on fat
 particle size and on protein adsorption by fat; the effect of
 fat/solids-not-fat ratio on various product characteristics; and the
 effect of emulsifier on various product characteristics.
 CC P (Milk and Dairy Products)
 CT BACTERIA; BUTTER; CHEESE; CONSISTENCY; CREAM; EMULSIFIERS; EMULSIONS;
 FLAVOUR; HOMOGENIZATION; LACTOSE; MILK; MINERALS; MOISTURE CONTENT;
 POTASSIUM; SALT; SOLIDS; SORBIC ACID; SORPTION; SPREADS; STABILITY;
 VISCOSITY; WHEY; ADSORPTION; ASH; EMULSIFIER; EMULSION; FAT; MILK (FATS);
 MILK (PROTEINS); MILK FAT; MOISTURE; NaCl; PLASTICITY; POTASSIUM SORBATE;
 PROTEIN; SODIUM CHLORIDE; SORBATE; SPREAD; WHEY-BASED; WHEY-MILK #
 PRODUCTS; ADSORPTION ; BACTERIA ; BUTTER ; CHEESE ; CREAM ; FLAVOUR
 ; HOMOGENIZATION ; LACTOSE ; SOLIDS ; SPREADS ; STABILITY ; WHEY

 L1 ANSWER 9 OF 9 FROSTI COPYRIGHT 2002 LFRA
 AN 481642 FROSTI
 TI Fat/**whey emulsion** for production of reduced-fat
 cheese.
 IN Marshall R.J.
 PA University of North London
 SO British Patent Application
 PI GB 2324236 A
 AI 19970417
 DT Patent
 LA English
 SL English
 AB An additive is disclosed for use in manufacturing reduced-fat cheese.
 Butter oil is heated to 60 C and added to distilled water containing
 whey-protein concentrate. The mixture is homogenized to give a creamy
 emulsion that incorporates fat droplets smaller than 1 micrometre coated
 with whey protein. This emulsion is added to skimmed milk to give a fat
 content about 50% of that in normal milk, and used to make Cheddar-type
 cheese.
 SH DAIRY PRODUCTS
 CT CHEDDAR CHEESE; CHEESE; DAIRY PRODUCTS; EMULSIONS; LOW CALORIE CHEESE;
 LOW FAT CHEESE; LOW FAT DAIRY PRODUCTS; PATENT; PRODUCTION; UK PATENT;
 WHEY PRODUCTS
 DED 10 Dec 1998

AN 88(08):H0089 FSTA FS FSTA
 TI Acceptance of **cream** liqueurs made with **whey** protein
concentrate.
 AU Kaustinen, E. M.; Bradley, R. L., Jr.
 CS Dep. of Food.Sci., Univ. of Wisconsin, Madison, Wisconsin 53706, USA
 SO Journal of Dairy Science, (1987) 70 (12) 2493-2498, 20 ref.
 ISSN: 0022-0302.
 DT Journal
 LA English
 AB Experimental **cream** liqueurs were made containing 3-6%
whey protein **concentrate** (WPC). as emulsifier, 12-16%
 milk fat, 12-20% sucrose and 14% ethanol (added before or after
homogenization of the other ingredients). Samples made with 6%
 WPC, 15% sucrose, using 42%-fat **cream** or 62%-fat washed
cream, and with ethanol added before **homogenization**, had
 the longest shelf-life (at least 90 days at 40.degree. C) and had
 satisfactory viscosity. The sample made from washed **cream** had a
 less marked colour, aroma and alcoholic flavour than a commercial product
 (Demitasse Coffee **Cream** Liqueur), and was less uniform and less
 viscous; a higher intensity of off-flavours was, however, noted in the
 commercial product, so that the experimental sample was preferred (P <
 0.05). The stability of **cream** liqueurs was improved by use of
whey protein **concentrates** in place of caseinate, by
 inclusion of sodium citrate and by **homogenization** after ethanol
 addition. (BWH)
 CC H (Alcoholic and Non-Alcoholic Beverages)
 IT Liqueurs; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT **Whey**; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT Proteins milk; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT Sensory properties; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT **Cream**; **whey** protein **concentrates** and sensory
 properties of **cream** liqueurs
 IT Beverages alcoholic
 IT Dairy products

AN 404166 FROSTI
TI Fresh **cream** emulsion having acid resistance and heat resistance
and its production.
IN Iwana H.; Nakatsubo T.; Otomo H.; Shibukawa N.
PA Meiji Milk Prod. Co. Ltd
SO Japanese Patent Application
PI JP 07079699 A 19950328
AI 19930920
NTE 19950328
DT Patent
LA Japanese
SL English
AB An acid- and heat-resistant fresh **cream** emulsion, which can be
used to provide a fresh **cream** flavour to canned coffee drinks,
is described. The fresh **cream** emulsion is made by blending and
homogenising fresh **cream** and an emulsifying agent with
a **whey** protein **hydrolysate**, obtained by the partial
hydrolysis of a beta-lactoglobulin-rich **whey** protein.
SH DAIRY PRODUCTS
CT ACID RESISTANT; CANNED; COFFEE DRINK; EMULSIONS; FRESH **CREAM**;
HEAT RESISTANT; JAPANESE PATENT
DED 14 Mar 1996

AN 69(08):P0710 FSTA FS FSTA
TI Dietetic @milk@ for @infants@.
AU Nicolic, V.; Nemet, V.
CS Roumania, Minister for the Food Industry
SO British Patent, (1969) 1 149 015.
DT Journal
LA English
AB Cows' skim-milk is renneted and the curd processed at 85-90.degree.C with the addition of emulsifying salts. The processed product is then cooled, finely comminuted and extracted with **whey** (previously separated from the curd) with mixing for 3 min at 40-42.degree.C. The mixture is then filtered, the filtrate obtained containing 6-7% soluble proteins. The **cream** resulting from the separation of the initial milk is then added as required to the filtrate to obtain the desired fat content, while soluble protein level is regulated by the addition of **whey**. Fe and Ca salts may also be added. The product is then **homogenized**, pasteurized, and **concentrated** or dried. Water-soluble vitamins may be added between pasteurization and concentration. From 300 l. of cows' milk about 90 l. humanized milk are obtained, containing 3.5% fat, 2.8% protein and 4.75% lactose. (FL)
CC P (Milk and Dairy Products)
IT milk; Dietetic milk for infants
IT babies; Dietetic milk for infants

AN 87(03):V0087 FSTA FS FSTA
TI [Process for preparing a nutritional drink from **whey**.]
AU Vieco de Velez, S. M.
SO French Patent Application
PI FR 2567366 A1 1986
DT Patent
LA French
AB The protein-rich **whey** drink is prepared by concentrating **whey** 5-fold by ultrafiltration; incubation of the retentate with 1-5% lactic acid bacteria at 35-50.degree. C for 8-18 h; addition of stabilizers and pasteurized **cream** (at 0.5-5% of the finished product fat content), with or without fruit **concentrates**, preservatives, or 7-12% sugar; heat treatment to partially denature the soluble proteins; and **homogenization**, at 50-300 kg/cm2 and 60-80.degree. C, before or after heat treatment. The drink is claimed to have a shelf-life of up to 45 days at 06.degree. C. (JLR)
CC V (Patents)
IT Proteins milk; **whey** beverages, ultrafiltration preparation of proteins-rich
IT Ultrafiltration; **whey** beverages, ultrafiltration preparation of proteins-rich
IT Beverages; **whey** beverages, ultrafiltration preparation of proteins-rich
IT **Whey**; ultrafiltration preparation of proteins-rich **whey** beverages

AN 92(12):P0122 FSTA FS FSTA
TI [Mixture for koumiss and manufacturing method.]
AU Molochnikov, V. V.; Anisimov, S. V.; Kholodov, G. I.; Shilovskaya, T. E.;
Lutsevich, A. N.
CS Union of Soviet Socialist Republics, Vsesoyuznyi
Nauchno-issledovatel'skii
Institut Kompleksnogo Ispol'zovaniya Molochnogo Syr'ya
SO USSR Patent
PI SU 1664238 1991
DT Patent (Patent)
LA Russian
AB A mixture for koumiss, intended to give a product similar to that made
using mares' milk in terms of protein and lactose contents, comprises; a
native casein **concentrate** (9-10 wt.%); **cream** (6.2-6.4
wt.%); and tvorog **whey** (the remainder). Ingredients are mixed,
(the tvorog **whey** being 1st condensed to 9-10% and demineralized
to 50-70%), and the product is **homogenized, concentrated**
and dried. (KME(ALR))
CC P (Milk and Dairy Products)
CT Cultured milks; Patents; KOUMISS; USSR; Dairy products

AN 94(04):P0108 FSTA FS FSTA
TI [Preparation of delactosed milk for nursing infants.]
AU Gonzalez, J.; Real del Sol, E.; Perea, J.; Martinez, G.; Ortega, A.
CS Inst. de Investigaciones para la Ind. Alimentaria, Cuba
SO Alimentaria, (1993) No. 239, 67-71, 21 ref.
ISSN: 0300-5755.
DT Journal
LA Spanish SL English
AB Processing of a lactose-free milk for infants with lactose intolerance or galactosaemia is described. The dietetic milk was prepared from a 1:1 mixture of skim milk and cheese **whey** (7.47% TS, 1.79% protein, 0.20% fat and 0.74% ash) which was heated to 50.degree. C and treated by ultrafiltration followed by diafiltration to give a **concentrate** of 13-15% TS. The **concentrate** was pasteurized at 74.degree. C, cooled and mixed with **cream** (42% fat), corn oil, sugar, maltodextrin and water; this mixture was **homogenized** at pressure 160 kg/cm², pasteurized at 80.degree. C and spray dried. The dried product was canned under N₂ to improve shelf life at ambient temp. Composition of the dried low lactose milk (mean of 3 batches) was: protein, 11.00%; fat, 28.86%; total sugars, 57.33%; ash, 1.56%; moisture, 1.25%; and pH of a 12% solution, 6.71. Microbiological quality was good and sensory properties were satisfactory. The dried milk was reconstituted with water to 12.0% TS for use in infant feeding. (JMa)
CC P (Milk and Dairy Products)
CT Lactose; Infant foods; MILK INFANT FORMULAS; Processed foods; Sugars

AN 192972 FROSTI
 TI Physico-chemical and rheological properties of milk fat globules with modified membranes.
 AU Aguilera J.M.; Kessler H.G.
 SO Milchwissenschaft, 1988, 43 (7), 411-5 (11 ref.)
 DT Journal
 LA English
 SL English; German
 AB Milk fat globules with modified membranes were prepared by washing and two-step **homogenisation** of **cream** in the presence of **whey** protein **concentrate**, sodium caseinate or skimmed milk powder. Electron microscopic examination revealed that fat globules with reformed membranes had smaller mean diameters and higher stability against coalescence than these in washed **cream**. Addition of modified fat globules to **whey** protein **concentrate** gels increased gel firmness whereas addition of washed globules weakened the structure.
 CT CHEMICAL PROPERTIES; DAIRY PRODUCTS; FAT GLOBULES; FATS; FIRMNESS; FUNCTIONAL PROPERTIES; GELATION; GELS; GLOBULES; **HOMOGENIZATION**; MEMBRANES; MILK; MILK PROTEIN; MILK PROTEINS; MODIFICATION; PHYSICAL PROPERTIES; PROPERTIES; PROTEIN GELS; PROTEINS; STRUCTURE; **WHEY** PROTEIN; **WHEY** PROTEINS
 DED 8 Dec 1988
 L8 ANSWER 60 OF 62 FROSTI COPYRIGHT 2001 LFRA
 AN 179499 FROSTI
 TI Technical treatment of milk.
 AU Nielsen P.; Nielsen E.W.
 SO Meat science, milk science and technology, edited by H.R. Cross and A.J. Overby. Amsterdam: Elsevier Science Publishers, 211-26 (Many ref. En)., 1988
 B, Disciplinary Approach;, 3
 NTE World animal Science.
 DT Book Article
 CT APPLICATIONS; BACTERIA; BROWNING; CHEESE; CLARIFICATION; COAGULATION; COLOUR; **CONCENTRATES**; **CREAM**; CROSS FLOW FILTRATION; DAIRY EQUIPMENT; DAIRY INDUSTRY; DESTRUCTION; DEVELOPMENT; ENZYMES; EQUIPMENT; EXTRACTION; EXTRACTION EQUIPMENT; FAT GLOBULES; FATS; FILTRATION; FILTRATION EQUIPMENT; FLAVOUR; GLOBULES; HEAT; HEAT EXCHANGERS; HEAT STABILITY; HEATING; **HOMOGENIZATION**; **HOMOGENIZATION** EQUIPMENT; **HOMOGENIZERS**; INCREASE; INHIBITION; LACTIC ACID BACTERIA; MEMBRANES; MICROORGANISMS; MILK; NUTRITIONAL VALUE; OSMOSIS; PASTEURIZATION; PASTEURIZATION EQUIPMENT;
 PH; PROCESSING; PRODUCTION; PROPERTIES; PROTEIN **CONCENTRATES**; PROTEINS; REDUCTION; REVERSE OSMOSIS; REVIEW; SENSORY PROPERTIES; SEPARATION; SEPARATION EQUIPMENT; SEPARATORS; SHELF LIFE; SIZE; SIZE REDUCTION; SKIMMED MILK; STABILITY; STERILIZATION; STERILIZATION EQUIPMENT; TEMPERATURE; TYPE; ULTRAFILTRATION; VISCOSITY; **WHEY** PROTEIN; **WHEY** PROTEINS
 DED 29 Sep 1988

AN 69(08):P0710 FSTA FS FSTA
TI Dietetic @milk@ for @infants@.
AU Nicolic, V.; Nemet, V.
CS Roumania, Minister for the Food Industry
SO British Patent, (1969) 1 149 015.
DT Journal
LA English
AB Cows' skim-milk is renneted and the curd processed at 85-90.degree.C with the addition of emulsifying salts. The processed product is then cooled, finely comminuted and extracted with **whey** (previously separated from the curd) with mixing for 3 min at 40-42.degree.C. The mixture is then filtered, the filtrate obtained containing 6-7% soluble proteins. The **cream** resulting from the separation of the initial milk is then added as required to the filtrate to obtain the desired fat content, while soluble protein level is regulated by the addition of **whey**. Fe and Ca salts may also be added. The product is then **homogenized**, pasteurized, and **concentrated** or dried. Water-soluble vitamins may be added between pasteurization and concentration. From 300 l. of cows' milk about 90 l. humanized milk are obtained, containing 3.5% fat, 2.8% protein and 4.75% lactose. (FL)
CC P (Milk and Dairy Products)
IT milk; Dietetic milk for infants
IT babies; Dietetic milk for infants

AN 87(03):V0087 FSTA FS FSTA
TI [Process for preparing a nutritional drink from **whey**.]
AU Vieco de Velez, S. M.
SO French Patent Application
PI FR 2567366 A1 1986
DT Patent
LA French
AB The protein-rich **whey** drink is prepared by concentrating **whey** 5-fold by ultrafiltration; incubation of the retentate with 1-5% lactic acid bacteria at 35-50.degree. C for 8-18 h; addition of stabilizers and pasteurized **cream** (at 0.5-5% of the finished product fat content), with or without fruit **concentrates**, preservatives, or 7-12% sugar; heat treatment to partially denature the soluble proteins; and **homogenization**, at 50-300 kg/cm2 and 60-80.degree. C, before or after heat treatment. The drink is claimed to have a shelf-life of up to 45 days at 06.degree. C. (JLR)
CC V (Patents)
IT Proteins milk; **whey** beverages, ultrafiltration preparation of proteins-rich
IT Ultrafiltration; **whey** beverages, ultrafiltration preparation of proteins-rich
IT Beverages; **whey** beverages, ultrafiltration preparation of proteins-rich
IT **Whey**; ultrafiltration preparation of proteins-rich **whey** beverages

AN 88(08):H0089 FSTA FS FSTA
 TI Acceptance of **cream** liqueurs made with **whey** protein
concentrate.
 AU Kaustinen, E. M.; Bradley, R. L., Jr.
 CS Dep. of Food Sci., Univ. of Wisconsin, Madison, Wisconsin 53706, USA
 SO Journal of Dairy Science, (1987) 70 (12) 2493-2498, 20 ref.
 ISSN: 0022-0302.
 DT Journal
 LA English
 AB Experimental **cream** liqueurs were made containing 3-6%
whey protein **concentrate** (WPC) as emulsifier, 12-16%
 milk fat, 12-20% sucrose and 14% ethanol (added before or after
homogenization of the other ingredients). Samples made with 6%
 WPC, 15% sucrose, using 42%-fat **cream** or 62%-fat washed
cream, and with ethanol added before **homogenization**, had
 the longest shelf-life (at least 90 days at 40.degree. C) and had
 satisfactory viscosity. The sample made from washed **cream** had a
 less marked colour, aroma and alcoholic flavour than a commercial product
 (Demitasse Coffee **Cream** Liqueur), and was less uniform and less
 viscous; a higher intensity of off-flavours was, however, noted in the
 commercial product, so that the experimental sample was preferred ($P < 0.05$). The stability of **cream** liqueurs was improved by use of
whey protein **concentrates** in place of caseinate, by
 inclusion of sodium citrate and by **homogenization** after ethanol
 addition. (BWH)
 CC H (Alcoholic and Non-Alcoholic Beverages)
 IT Liqueurs; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT **Whey**; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT Proteins milk; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT Sensory properties; **cream** liqueurs, **whey** protein
concentrates and sensory properties of
 IT **Cream**; **whey** protein **concentrates** and sensory
 properties of **cream** liqueurs
 IT Beverages alcoholic
 IT Dairy products

AN 92(12):P0122 FSTA FS FSTA
TI [Mixture for koumiss and manufacturing method.]
AU Molochnikov, V. V.; Anisimov, S. V.; Kholodov, G. I.; Shilovskaya, T. E.;
Lutsevich, A. N.
CS Union of Soviet Socialist Republics, Vsesoyuznyi
Nauchno-issledovatel'skii
Institut Kompleksnogo Ispol'zovaniya Molochnogo Syr'ya
SO USSR Patent
PI SU 1664238 1991
DT Patent (Patent)
LA Russian
AB A mixture for koumiss, intended to give a product similar to that made
using mares' milk in terms of protein and lactose contents, comprises: a
native casein **concentrate** (9-10 wt.%); **cream** (6.2-6.4
wt.%); and tvorog **whey** (the remainder). Ingredients are mixed,
(the tvorog **whey** being 1st condensed to 9-10% and demineralized
to 50-70%), and the product is **homogenized, concentrated**
and dried. (KME(ALR))
CC P (Milk and Dairy Products)
CT Cultured milks; Patents; KOUMISS; USSR; Dairy products

AN 94(04):P0108 FSTA FS FSTA
TI [Preparation of delactosed milk for nursing infants.]
AU Gonzalez, J.; Real del Sol, E.; Perea, J.; Martinez, G.; Ortega, A.
CS Inst. de Investigaciones para la Ind. Alimentaria, Cuba
SO Alimentaria, (1993) No. 239, 67-71, 21 ref.
ISSN: 0300-5755.
DT Journal
LA Spanish SL English
AB Processing of a lactose-free milk for infants with lactose intolerance or galactosaemia is described. The dietetic milk was prepared from a 1:1 mixture of skim milk and cheese **whey** (7.47% TS, 1.79% protein, 0.20% fat and 0.74% ash) which was heated to 50.degree. C and treated by ultrafiltration followed by diafiltration to give a **concentrate** of 13-15% TS. The **concentrate** was pasteurized at 74.degree. C, cooled and mixed with **cream** (42% fat), corn oil, sugar, maltodextrin and water; this mixture was **homogenized** at pressure 160 kg/cm², pasteurized at 80.degree. C and spray dried. The dried product was canned under N₂ to improve shelf life at ambient temp. Composition of the dried low lactose milk (mean of 3 batches) was: protein, 11.00%; fat, 28.86%; total sugars, 57.33%; ash, 1.56%; moisture, 1.25%; and pH of a 12% solution, 6.71. Microbiological quality was good and sensory properties were satisfactory. The dried milk was reconstituted with water to 12.0% TS for use in infant feeding. (JMa)
CC P (Milk and Dairy Products)
CT Lactose; Infant foods; MILK INFANT FORMULAS; Processed foods; Sugars

AN 192972 FROSTI
 TI Physico-chemical and rheological properties of milk fat globules with modified membranes.
 AU Aguilera J.M.; Kessler H.G.
 SO Milchwissenschaft, 1988, 43 (7), 411-5 (11 ref.)
 DT Journal
 LA English
 SL English; German
 AB Milk fat globuls with modified membranes were prepared by washing and two-step **homogenisation** of **cream** in the presence of **whey** protein **concentrate**, sodium caseinate or skimmed milk powder. Electron microscopic examination revealed that fat globules with reformed membranes had smaller mean diameters and higher stability against coalescence than these in washed **cream**. Addition of modified fat globules to **whey** protein **concentrate** gels increased gel firmness whereas addition of washed globules weakend the structure.
 CT CHEMICAL PROPERTIES; DAIRY PRODUCTS; FAT GLOBULES; FATS; FIRMNESS; FUNCTIONAL PROPERTIES; GELATION; GELS; GLOBULES; **HOMOGENIZATION**; MEMBRANES; MILK; MILK PROTEIN; MILK PROTEINS; MODIFICATION; PHYSICAL PROPERTIES; PROPERTIES; PROTEIN GELS; PROTEINS; STRUCTURE; **WHEY** PROTEIN; **WHEY** PROTEINS
 DED 8 Dec 1988

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 AN 179499 FROSTI
 TI Technical treatment of milk.
 AU Nielsen P.; Nielsen E.W.
 SO Meat science, milk science and technology, edited by H.R. Cross and A.J. Overby. Amsterdam: Elsevier Science Publishers, 211-26 (Many ref. En)., 1988
 B, Disciplinary Approach;, 3
 NTE World animal Science.
 DT Book Article
 CT APPLICATIONS; BACTERIA; BROWNING; CHEESE; CLARIFICATION; COAGULATION; COLOUR; **CONCENTRATES**; **CREAM**; CROSS FLOW FILTRATION; DAIRY EQUIPMENT; DAIRY INDUSTRY; DESTRUCTION; DEVELOPMENT; ENZYMES; EQUIPMENT; EXTRACTION; EXTRACTION EQUIPMENT; FAT GLOBULES; FATS; FILTRATION; FILTRATION EQUIPMENT; FLAVOUR; GLOBULES; HEAT; HEAT EXCHANGERS; HEAT STABILITY; HEATING; **HOMOGENIZATION**; **HOMOGENIZATION** EQUIPMENT; **HOMOGENIZERS**; INCREASE; INHIBITION; LACTIC ACID BACTERIA; MEMBRANES; MICROORGANISMS; MILK; NUTRITIONAL VALUE; OSMOSIS; PASTEURIZATION; PASTEURIZATION EQUIPMENT;
 PH; PROCESSING; PRODUCTION; PROPERTIES; PROTEIN **CONCENTRATES**; PROTEINS; REDUCTION; REVERSE OSMOSIS; REVIEW; SENSORY PROPERTIES; SEPARATION; SEPARATION EQUIPMENT; SEPARATORS; SHELF LIFE; SIZE; SIZE REDUCTION; SKIMMED MILK; STABILITY; STERILIZATION; STERILIZATION EQUIPMENT; TEMPERATURE; TYPE; ULTRAFILTRATION; VISCOSITY; **WHEY** PROTEIN; **WHEY** PROTEINS
 DED 29 Sep 1988

AN 404166 FROSTI
TI Fresh **cream** emulsion having acid resistance and heat resistance
and its production.
IN Iwana H.; Nakatsubo T.; Otomo H.; Shibukawa N.
PA Meiji Milk Prod. Co. Ltd
SO Japanese Patent Application
PI JP 07079699 A 19950328
AI 19930920
NTE 19950328
DT Patent
LA Japanese
SL English
AB An acid- and heat-resistant fresh **cream** emulsion, which can be
used to provide a fresh **cream** flavour to canned coffee drinks,
is described. The fresh **cream** emulsion is made by blending and
homogenising fresh **cream** and an emulsifying agent with
a **whey** protein **hydrolysate**, obtained by the partial
hydrolysis of a beta-lactoglobulin-rich **whey** protein.
SH DAIRY PRODUCTS
CT ACID RESISTANT; CANNED; COFFEE DRINK; EMULSIONS; FRESH **CREAM**;
HEAT RESISTANT; JAPANESE PATENT
DED 14 Mar 1996